CLAIMS:

1. A thermal printer capable of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver, said printer comprising:

a thermal print head for heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that crease formation can occur at least in respective regions of the dye transfer area adjacent the two edge areas; and

a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having an elastic cover layer that can be stretched towards coaxial opposite ends of said roller to spread at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation, and having respective movable members moving to stretch said elastic cover layer towards said opposite ends of said roller.

2. A thermal printer as recited in claim 1, wherein a donor web take-up exerts a pulling force on the dye transfer area and two edge areas at said print head which longitudinally tensions the dye transfer area and two edge areas, and said movable members move to stretch said elastic cover layer towards said opposite ends of said roller in response to longitudinally tensioning the dye transfer area and two edge areas.

3. A method in a thermal printer of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver, said method comprising:

heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating

two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that crease formation can occur at least in respective regions of the dye transfer area adjacent the two edge areas; and

stretching an elastic cover layer on a crease-preventing roller that supports at least the dye transfer area and two edge areas towards coaxial opposite ends of the roller, so that the elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation.

4. A thermal printer capable of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver, said printer comprising:

a thermal print head for heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that crease formation can occur at least in respective regions of the dye transfer area adjacent the two edge areas; and

a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having respective projections that can be deformed towards coaxial opposite ends of said roller, and having an elastic cover layer over said projections that is stretched towards said opposite ends of said roller by said projections being deformed towards said opposite ends of said roller, whereby said elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation.

5. A thermal printer capable of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver, said printer comprising:

a thermal print head for heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that the dye transfer area is vulnerable to being longitudinally stretched relative to the two edge areas to possibly cause crease formation at least in respective regions of the dye transfer area adjacent the two edge areas;

a donor web take-up that exerts a pulling force on the dye transfer area and two edge areas at said print head which longitudinally tensions the dye transfer area and two edge areas, to tend to longitudinally stretch the dye transfer area relative to the two edge areas; and

a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having respective projections that are resilient to be deformed towards coaxial opposite ends of said roller when said donor web take-up longitudinal tensions the dye transfer area and two edge areas, and having an elastic cover layer over said projections that is stretched towards said opposite ends of said roller by said projections being deformed towards said opposite ends of said roller, whereby said elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation.

6. A thermal printer as recited in claim 5, wherein said elastic cover layer is an elastomeric material having a modulus of elasticity within the range of 1 Mega Pascal – 20 Mega Pascal.

7. A thermal printer as recited in claim 6, wherein said elastomeric material has a hardness within the range of 20 Shore A – 90 Shore A.

8. A thermal printer as recited in claim 5, wherein said elastic cover layer is an elastomeric material constructed of either styrene-butadiene rubber, polyisoprene rubber, polybutadiene rubber, silicon rubber, ethylene-propylene rubber, urethane rubber, or fluorocarbon rubber.

9. A thermal printer as recited in claim 5, wherein said elastic cover layer is perforated to facilitate it being stretched when said projections are deformed.

10. A thermal printer as recited in claim 5, wherein said elastic cover layer has surface holes to facilitate it being stretched when said projections are deformed.

11. A thermal printer as recited in claim 5, wherein said elastic cover layer has encapsulated microspheres containing soft material that is softer than said elastic cover layer to facilitate said elastic cover layer being stretched when said projections are deformed.

12. A thermal printer as recited in claim 5, wherein said respective projections jut out an acute angle to be inclined at the acute angle towards said opposite ends of said roller in order to facilitate said projections being deformed towards said opposite ends of said roller when said donor web take-up longitudinal tensions the dye transfer area and two edge areas.

13. A thermal printer as recited in claim 12, wherein said respective projections are helical ribs that spiral inwardly from said opposite ends of said roller in addition to jutting out at the acute angle.

14. A thermal printer as recited in claim 5, wherein said crease-preventing roller is a platen roller that is movable to press the dye receiver against the dye transfer area and two edge areas and in turn press the dye transfer area and two edge areas against said print head to permit dye transfer from the dye transfer area to the dye receiver.

15. A method in a thermal printer of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver, said method comprising:

heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that crease formation can occur at least in respective regions of the dye transfer area adjacent the two edge areas; and

deforming towards coaxial opposite ends of a crease-preventing roller that supports at least the dye transfer area and two edge areas, respective projections on the roller, to stretch an elastic cover layer on the projections towards the opposite ends of the roller, whereby the elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation.